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HAZARDOUS WASTE DIVISION

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Midway Landfill Update - July 30, 1986
-Reporting on the Status of Activities as of July 23, 1986-

AUG 06 1986

Superfund Branch

WHAT ARE THE MONITORING RESULTS FROM THE NEW ECOLOGY GAS PROBES?

The Department of Ecology recently installed new gas monitoring probes at points farther from the landfill than previously tested. Most of these probes are multi-level containing shallow, medium, and deep probes; however, some contain probes at only medium and shallow depths. The locations of these probes are:

Approx. 242nd and 30th Ave. S.	# 2
17th Ave. S. and 245th	# 13
248th and 26th Ave. S.	# 88
Approx. 255th and Pacific Hwy. S.	# 89
End of 256th Ave. S.	# 87
247th St. and 35th Ave. S.	# 85
Inside Armory property	# 84
Reith and Military Rd. S.	# 90 & # 86
253rd and Reith Rd.	# 91
239th and 41st St.	# 92

The initial results of monitoring the probes indicate that methane gas is present farther from the landfill than expected. The majority of the methane found in these new probes is at or below 50 feet deep in the ground and does not pose an immediate threat to homes or businesses in their vicinity. However, the presence of methane at this depth represents a long-term concern we must address.

Because of this new information, the City of Seattle will be installing more gas monitoring probes farther away from the landfill. Additional extraction wells will also be installed to remove gas from the newly defined areas. Locations for these additional probes and wells are being determined at this time by Ecology and Seattle engineers and drilling is expected to begin shortly. More information on the recently installed probes and plans for new probe and well installations will be reported in future updates.

WHAT HAS BEEN DONE AND WILL BE DONE TO CHECK FOR LEACHATE AT THE MIDWAY LANDFILL?

At Midway, surface water sampling has been underway for the last year. With the help of homeowners in the vicinity of the Midway Landfill, Ecology staff have located and tested numerous springs and surface waters. To date, none of the water bodies tested appeared to contain leachate and chemical testing has not identified any unusually high levels of contaminants in them. However, it is possible leachate could be present at other times of the year or in the future and additional testing is necessary to determine this.

As part of the Remedial Investigation, the City of Seattle will install up to 17 ground water monitoring wells during the next few months. These wells will be

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installed at various locations around the Midway Landfill site. Locations of these wells are determined by engineers and geologists. They have generally identified the locations for 10 of the ground water monitoring wells and will determine locations for the remaining seven wells after the first have been installed and tested.

WHAT IS LEACHATE AND HOW IS IT IDENTIFIED?

Leachate is the liquid by-product of the decomposition of refuse and garbage in a landfill. It is a complex mixture of numerous contaminants including natural organic matter, nutrients, salts, metals and many manmade organic chemicals. Fresh leachate is typically black in color, has a very strong smell like rotting garbage and will often stain soil and rocks with a reddish-orange scum. Many of you may remember the "Black Lagoon" at Midway which contained leachate-contaminated water.

As leachate ages or becomes diluted by cleaner water, the color and odor are less distinctive and scientists must rely on chemical testing to determine whether leachate is present. This is not an easy task because there is no one chemical that distinguishes leachate from other contaminated water. Many of the contaminants contained in leachate can be found in natural water, street runoff or leakage from septic tanks. When looking for leachate, a scientist is much like a detective, looking for clues to help distinguish between contamination found caused by leachate or by some other source.

One clue that lets scientists know leachate is present is the amount of contamination in the water sampled. Even though many of the contaminants found in leachate are found in water contaminated from other sources, the quantity tends to be much greater in leachate contaminated water. Another clue is the way for leachate to travel from the landfill to the water being sampled. Scientists study surface drainage patterns and the speed and direction of movement of underground waters, called ground water.

Determining the direction of surface water drainage is fairly easy; however, this is not the case with ground water. To do this scientists must drill wells to identify porous sand and gravel layers where leachate is most likely to seep through. Once the direction of ground water movement is defined, chemical testing is done to determine if leachate is present. They also look for springs fed by ground water. If leachate is present, these springs are likely places where it can be found.

These kinds of investigations have been underway in the vicinity of the Midway Landfill for the past year or so. The remedial investigation, which is just beginning, represents a new, more intensive study that will take place over the next 9-12 months.

Seattle Engineering Department



Eugene V. Avery, Director of Engineering
Charles Royer, Mayor

July 31, 1986

Midway Landfill Newsletter Landfill Gas Control Update

Improvements to Perimeter System

The City of Seattle began drilling this week to install three new gas extraction wells at the Midway Landfill. These are located near the southeast boundary of the site, and are intended to reinforce the perimeter gas control system at this location.

Off-Site Wells

The City of Seattle began operating three more gas extraction wells this week in the community near the Midway Landfill. These wells are located near Linda Heights Park, near the National Guard Armory, and near the northwest corner of the landfill. The City of Seattle installed these wells in June. Requirements for electrical inspection delayed putting them into operation until last week.

Emission Test Results

The City of Seattle and the Department of Ecology are regularly testing the emissions of all new gas extraction wells. The City of Seattle's daily test results and the Department of Ecology's preliminary test results for volatile organics are available at the Midway Information Office.

Home Monitoring

City of Seattle home monitoring crews recently reduced the frequency of inspecting homes for combustible gas. Homes that were being monitored twice a month for methane are now being monitored once a month. Homes with methane readings below 500 ppm and located east of I-5, west of 42nd Avenue South, north of South 252nd Street and south of South 248th Street will also be monitored on a monthly basis. Home monitoring in this area is being reduced since all methane probe readings in the area are below the explosive level for methane. These changes will allow staff to spend more time monitoring homes in new areas near the Department of Ecology's newly installed gas monitoring probes.

A team of employees from four agencies will work evenings on August 5, 6, and 7, going door-to-door to monitor areas not canvassed before.

They will work in the residential area southeast of the landfill. One City of Seattle inspector has already begun calling on some of these homes.

The monitoring in new areas is being done as a precautionary measure. Gas monitoring probes show gas at depth in these areas, not near the surface.

Planned Gas Control Activities

The City of Seattle project manager has identified locations for three new gas extraction wells to be located in the community south of the Midway Landfill. He has also identified locations for ten additional gas monitoring probes in various locations around the landfill. Drilling for these new extraction wells and monitoring probes should begin next week.

Landfill Underground Fire

Workers at the Midway Landfill discovered smoke coming from a vent on the morning of July 21. They began digging, and uncovered refuse burning near the surface, to a depth of 7 feet and over an area approximately 30 feet by 40 feet. The fire was extinguished by 4 p.m. that day. Mark Edens, project manager, explained that the fire would not travel underground with landfill gas into the residential community. Soil blocks the combustion process.

The fire was very likely caused by over-pumping perimeter system extraction wells, drawing oxygen into the refuse. When air enters, the decomposing refuse heats up, and may burn.

Seattle Engineering Department consultants will increase the frequency of monitoring for elevated temperatures in the wells on the site to five days a week. They will reduce the pull exerted by the extraction wells, if temperatures rise, to reduce the possibility of another fire.

Not Getting Phone Calls Returned?

Many employees of the Seattle Engineering Department are devoting long hours to work on the Midway Landfill project. They may have more phone calls from the public than they are at times able to answer. If you need help getting through, you may call the Midway Information Office. We can help you reach the person you want to talk to, or help you obtain specific information. Call us at 946-4458.

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City of Seattle
Charles Royer, Mayor

King County
Tim Hill, Executive

Seattle-King County Department of Public Health

Bud Nicola, M.D., M.H.S.A., *Director*

**MIDWAY
HEALTH REPORT NUMBER 6**

During the past two months, representatives from the Seattle-King County Health Department, the City of Seattle, and the State Department of Ecology have been discussing the topic of a health survey in your area with Dr. Tom Burbacher from the Department of Environmental Health at the University of Washington. We thought that it would be a good idea to have Dr. Burbacher describe some of the details of these discussions with you in this newsletter. We hope this information will give you a better idea of what a health survey means and what a survey can and cannot do for you. We encourage you to think about the issues that Dr. Burbacher presents in this newsletter and to let us know how you feel about the various options that are being considered at this time. You can contact Jane Lee at the Health Department at 587-2722 or Dr. Burbacher directly at 545-2696 with your comments.

Before I begin to discuss the health survey, I think that it is important to take a look at where we are now. Currently, the health agencies have recorded information regarding several individual reports of health problems from residents who live around the landfill. A summary of these reports was presented in Health Bulletin #5. These reports provide specific information about those individuals who called the Midway Information Center to talk to the public health nurse. These reports, therefore, provide very little information regarding the general health status of the overall community. The health agencies also have the results of the tests conducted so far regarding air, water, and soil contamination. According to the agencies, the results of these tests do not indicate that a major public health threat exists for your community. However, during the next year an extensive investigation will be performed. This investigation will further evaluate the extent of the environmental contamination off site of the landfill. In my opinion, the major question to be answered at this time is, "What kinds of activities can be undertaken during this investigation to better define the health status of your community."

In response to this question, I have started a project to identify the appropriate activities that could be initiated to address the health issues. This project will include a review of previous health studies that have been performed at other "Superfund" sites around the country; a review of the information that is available at this time regarding the health problems of residents in your area; and a review of past and future environmental monitoring activities. This project will also provide recommendations to the health agencies regarding the objectives and scope of a health survey in your community.

Some of the objectives of a health survey that have been discussed include (1) determining the prevalence of various reported health problems in a defined "study area"; (2) determining the prevalence of various reported health problems in a defined "study area" and a "control area"; and (3) determining the relationship between various reported health problems and environmental problems in the "study area".

A survey developed to meet objective (1) would include interviews of families in the "study area" to gather information regarding the various health problems of these families. The information gathered from this survey would indicate the types of problems that are common, what age and sex groups are having these problems, and where these problems are occurring. Results of this survey would not indicate whether these problems are more common in the "study area". This survey also would not relate the reported health problems to any environmental problem.

A survey developed to meet objective (2) would provide the same information as above. This survey, however, would also include collecting information on families that are similar to those who live in the "study area" but do not live near the landfill. The results of this survey, then, would indicate if the reported problems experienced by families in the "study area" are more common than those of the families who live outside the area. The most important aspect of this study is identifying a suitable control area.

A survey developed to meet objective (3) would provide similar information regarding health problems as above. This survey, however, would also include procedures to use the environmental data. The environmental data would be used to investigate any relationships between environmental problems and reported health problems. This survey would assume that the results of the environmental monitoring indicate varying levels of contaminants in the "study area".

Another important aspect of a health survey relates to the scope of the study. Regardless of the objectives, decisions will have to be made regarding how many people to include in the survey; how extensive a questionnaire is needed; what specific health problems should be addressed; should school records and medical records be reviewed. These decisions will ultimately affect the results of the study and will determine the cost and length of time it will take to perform the study.

A few words of caution. The health surveys reviewed above will not provide quick and simple answers to all of your problems. All of these surveys will take a great deal of time (over one year), will cost a great deal of money (up to 1 million dollars) and still will not answer all of your questions. A health survey is not designed to provide individual "causes" for individual health problems. A survey can provide important information for your community. The survey can provide data regarding the prevalence of some specific reported health problems in your community. A survey can also indicate whether these reported problems occur in areas of known environmental contamination. Finally, a survey can provide important information concerning the general health status of your community at this time.

The health surveys reviewed above will require a long term commitment from your community. Each one of you will have to decide whether you are willing to spend a few hours sharing personal and medical information about your family with the surveyors. Only with a commitment from a great majority of the community will the surveys succeed. Judging from recent responses to public meetings and requests for public input in previous newsletters, it is doubtful at this time that enough community participation in a health survey could be generated to conduct a meaningful survey.

Let me know what you think. I am now in the process of scheduling small neighborhood meetings with groups who would like to discuss the health issues further. The only way that you will be sure that your concerns will be dealt with is to state them now. You can write to me or call at the address or phone number below.

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Seattle Engineering Department



Eugene V. Avery, Director of Engineering
Charles Royer, Mayor

July 30, 1986

Midway Landfill Newsletter Good Neighbor Program Up-Date

The City of Seattle has been operating the Good Neighbor Program since April 14, 1986. As of July 23, 1986, 168 home owners have enrolled in the Program. Sixty-seven owners have signed agreements reserving the right to participate at a later time.

The basic purpose of the Good Neighbor Program is to stabilize and guarantee property values to home owners within its boundaries. This guarantee is effective now, if the owner wishes to sell, or at any time during the life of the Program.

Representatives of the Seattle Engineering Department from the Midway Information Office have compiled a list of some of the most frequently asked questions about the Good Neighbor Program, in an effort to keep Midway residents current with its progress.

Q. Who conducts the City's appraisal of the seller's home?

A. The City is using several independent fee appraisers.

Q. How long has this appraisal been taking on the average?

A. After the appraiser receives the appraisal order from the City, the City has been setting a target date of two weeks for the finished appraisal.

Q. How can the seller find an appraiser that meets the City's qualifications?

A. The appraisers used by both the City and the seller must be MAI's, or SRA's, or VA or FHA approved. These appraisers may be found in the phone book. Ask them if they meet the above requirements. In addition, the Midway Information Office has a courtesy list that sellers may use.

Q. When does the "clock" start on the six-month period that the seller is required to have the home listed for sale before the City would purchase the property?

A. Under normal conditions, both the City and the seller get independent appraisals of the property, and inform each other when the appraisals are completed. The seller will then meet with a representative of the City to set the Fair Market Value of the property. (These meetings are set up afternoons and evenings by appointment.) When Fair Market Value is agreed upon, the seller and the City sign Part II of the Good Neighbor Program Participation Agreement. The seller then signs a Listing Agreement. This listing begins the formal six-month period.

- Q. Why does the City deduct "customary seller's costs" from the amount they pay the seller for their home?
- A. This is simply following the usual closing procedure that would occur under a normal sale. The real estate agent is being paid a certain percentage on the sale price they obtain from the buyer; the City is deducting a similar percentage on the part of the sale price that they provide. The seller ends up getting the same net cost that they would have received if the real estate agent had negotiated the total sale price from the buyer.
- Q. When can the seller expect to receive payment after the six months listing period is completed?
- A. This will depend on individual circumstances. The City and the seller go through the same closing procedures as on a private sale. However, this closing will proceed at a faster pace because the City doesn't have the delay of going through loan approval.
- Q. Can sellers list their homes and start the six-month period if they have had their appraisal completed, but are waiting for the City's appraisal?
- A. If the City feels that obtaining the City's appraisal is causing an unreasonable delay, special approval to start the "clock" can be given. The listing price may then be adjusted when the City's appraisal is completed.
- Q. If a seller wants to list their home before getting the City's appraisal, whom should they contact?
- A. The seller can leave a phone message with the Property Services Supervisor, Joachim Pestinger. This message should state their name and the fact that their appraisal is in. They will then receive a letter stating the conditions under which they may list their home.
- Q. What kind of success are buyers having in obtaining financing for buying a home in this area?
- A. There seems to have been some misunderstanding of the methane situation by a few mortgage companies. The City has met with some of these companies, and has explained the City's activities and programs in the Midway area. Since then, the lenders are willing to make loans to buyers, as long as the buyers meet normal loan criteria.
- Q. Is it true that the cost of home owner's insurance has increased in this area because of the landfill problems?
- A. This increase is probably a routine increase. According to the Washington State Insurance Commission, four major insurance companies have increased their rates since the first of the year. These are state-wide changes, and are not targeted specifically at the Midway area. However, if there are specific cases where an insurance company has stated that the increase is due to their perception of the methane impact, the Midway Information Office would like to be informed.